

IN THE CLAIMS:

Please amend claims 1, 5, 7, 10, 16, and 17 pursuant to 37 C.F.R. § 1.121 as follows (see the accompanying "marked up" version pursuant to § 1.121):

1. (Twice Amended) A slide drive device for a press machine, comprising:

 a slide;

said slide including a top and a bottom dead center position;

a single adjusting means for permitting adjustment of a stroke of said slide; and

said adjusting means simultaneously adjusting said top and bottom dead center positions by a same amount.

5. (Twice Amended) A slide drive device, according to claim 4, further comprising:

 a crankshaft;

first and second connecting rods on said crankshaft;

said connecting rod receiving a reciprocating motion and transmitting said reciprocating motion to said means for driving;

said connecting rod and said means for driving being effective to transmit said reciprocating motion to said dynamically balancing means; and

said guiding means being effective to convert said reciprocating motion to a guiding displacement, whereby said slide operates in said cycle.

7. (Twice Amended) A slide drive device for a press machine having a slide, comprising:

a slide;

said slide having a top and a bottom dead center position;

a single adjusting means for adjusting a stroke of said slide;

said adjusting means simultaneously adjusting said top and bottom dead center positions by a same amount;

a driving means for permitting driving of said slide drive device;

at least a first upper link;

said first upper link being connected to drive said slide in a cycle;

said driving means transmitting a driving displacement to said slide to drive said slide in said cycle; and

said driving means transmitting said adjustment to said slide whereby said stroke is adjusted.

10. (Twice Amended) A slide drive device, according to claim 9, further comprising:

a crankshaft;

first and second connecting rods on said crankshaft;

a center of said crankshaft vertically aligned with said second slider;

at least one of a first and second eccentric part on said crankshaft;
said first and second eccentric parts diametrically opposed on said crankshaft;
said first and second eccentric parts balanced about a rotation center of said crankshaft;

said at least one connecting rod on said one eccentric part;
said connecting rod receiving a reciprocating motion and transmitting said reciprocating motion to said driving means;

said driving means being effective to transmit said reciprocating motion to said dynamically balancing means; and

a guiding means being effective to convert said reciprocating motion to a guiding displacement, whereby said slide operates in said cycle.

16. (Twice Amended) A slide drive device, for a press machine having a slide, comprising:

a single means for adjusting said slide drive device;
a crankshaft;
a first eccentric part on said crankshaft;
a second eccentric part on said crankshaft;
said first and second eccentric parts operably opposing each other about a rotation center of said crankshaft;
a first and second connecting rod;

said connecting rods operably joined to said eccentric parts;
said connecting rods receiving a driving displacement from said crankshaft;
a first and second upper link;
said upper links operable about a fixed fulcrum pin;
a first and second middle link;
said middle links having first and second ends;
said connecting rods effective to transfer said driving displacement to said middle links at said second ends;

said upper links operably joined to said middle link at a center fulcrum point between said first and second ends;

said middle links effective to transfer said driving displacement to said upper links;

said middle links and said upper links operably effective to transfer said driving displacement to a slide and drive said slide in a cycle;

said connecting rods having a length (a);

said center fulcrum point located a length (c) from said second end;

said center fulcrum point located a length (b) from said first end; and

said lengths (a), (b), (c), having the following relationship:

$$(a):(b) = (b):(c) \quad (VII)$$

whereby said connecting rods operate horizontally to said crankshaft and said upper links and said middle links are effective to transfer said driving displacement to

B7
said slide and drive said slide in said cycle at a low speed adjacent said bottom dead center for increased force and a fast speed distal said bottom dead center for a speedier return.

17. (Amended) A slide drive device, according to claim 16, further comprising:
a top and a bottom dead center position of said slide;
said adjusting means permitting adjustment of a stroke of said slide;
said adjusting means permitting adjustment of said top and bottom dead center position at the same time;

B8
said adjusting means permitting said adjustment of said top and bottom dead center positions by the same amount;

at least one of a first and second horizontal link;
a first and second end on said one horizontal link;
said one horizontal link effective to receive said driving displacement at said second end;

said one horizontal link effective to receive said adjustment at said first end; and
said one horizontal link effective to transfer said driving displacement and said adjustment to said slide whereby said slide is adjusted and driven in said cycle.
